

exposing the hard mask to a stream of oxidizing gas in the reactor prior to or during said etch step in order to oxidize the surface of the hard mask and thereby slow down an etch rate of the hard mask.

50. (New) The method of claim 1, wherein:

said selecting step includes selecting a hard mask (1) on which has been or (2) on which can be developed at least one of an oxide, nitride, fluoride, boride and carbide.

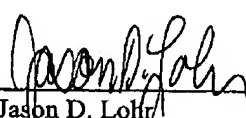
Remarks

A certificate of facsimile transmission under 37 C.F.R. § 1.8 is affixed hereto in accordance with 37 C.F.R. § 1.8(a). Any additional fees due for this case can be charged toward our Deposit Account #06-1325. Continued examination and allowance of the above case is requested.

Respectfully submitted,

Date: May 3, 2002

By: _____


Jason D. Lohr
Reg. No. 48,163

FLIESLER, DUBB, MEYER & LOVEJOY LLP
Four Embarcadero Center, Suite 400
San Francisco, California 94111-4156
Telephone: (415) 362-3800

APPENDIX

1. (Once Amended) A method for etching a pattern on a workpiece, comprising [containment of critical dimension growth of a feature located on a substrate including the steps of]:
selecting a [substrate] workpiece with a hard mask deposited over a layer to be etched, which hard mask is comprised of a reactive metal, [deposited over a layer to be etched] the hard mask further defining a pattern including at least one portion having a critical dimension; and
processing the [layer] workpiece in a reactor [.] by exposing the entire hard mask to an etch;
whereby the layer is etched corresponding to the pattern of the hard mask, and the growth of the layer during the etch is minimized in the portion of the layer corresponding to the critical dimension.
42. (New) The method of claim 1, wherein:
said selecting step includes selecting a workpiece having a hard mask, which hard mask comprises of one of titanium, aluminum, and tantalum.
43. (New) The method of claim 1, further comprising:
exposing the hard mask to a stream of oxidizing gas in the reactor prior to said etch step.
44. (New) The method of claim 1, further comprising:
exposing the hard mask to a stream of oxidizing gas in the reactor during said etch step.
45. (New) The method of claim 1, further comprising:
exposing the hard mask to an oxidizing stream comprising of one of oxygen, nitrogen, fluorine, boron, and carbon gas, and any combination of oxygen, nitrogen, fluorine, boron, and carbon gas, in the reactor prior to or during said etch step.
46. (New) The method of claim 1, wherein :

said selecting step includes selecting a workpiece with a lithographic layer covering the hard mask,

47. (New) The method of claim 1, wherein:

said selecting step includes selecting a substrate having a hard mask which is readily oxidizable.

48. (New) The method of claim 1, wherein:

said selecting step includes selecting a substrate with a hard mask, which hard mask is comprised of a metal with a low sputtering yield.

49. (New) The method of claim 1, further comprising:

exposing the hard mask to a stream of oxidizing gas in the reactor prior to or during said etch step in order to oxidize the surface of the hard mask and thereby slow down an etch rate of the hard mask.

50. (New) The method of claim 1, wherein:

said selecting step includes selecting a hard mask (1) on which has been or (2) on which can be developed at least one of an oxide, nitride, fluoride, boride and carbide.